

A new species of *Splendrillia*, with comments on two other species of the genus (Gastropoda: Turridae)

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ABSTRACT

A new species of drilliine turrid is described in the genus *Splendrillia* from the Gulf of Carpentaria, Queensland, Australia. It is compared with *S. aurora* (Thiele, 1925) from Sumatra, Indonesia and two Australian turrids, "*Crassispira*" *duplaris* (Hedley, 1922) and *Splendrillia eburnea* (Hedley, 1922). Additional information is provided on two species of *Splendrillia*, *S. gratiosa* (Sowerby, 1896) and *S. bednalli* (Sowerby, 1896). *S. gratiosa* is redescribed and compared with *S. hansenae* Wells, 1990. The known range of *S. bednalli* is extended to the south coast of Western Australia.

INTRODUCTION

Last year I (Wells, 1990) revised the Recent Australian species which had been placed in the turrid genera *Splendrillia* and *Austrodrillia* of the subfamily Drilliinae. Since the paper was published examination of unsorted specimens at the Australian Museum and material from the W. J. Paul collection in the National Museum of New Zealand has uncovered a new species of *Splendrillia* and provided additional information on two other species of the genus which should be recorded.

The following abbreviations are used: AMS, Australian Museum, Sydney; NMNZ, National Museum of New Zealand; SAM, South Australian Museum.

Subfamily Drilliinae Morrison, 1966

Genus *Splendrillia* Hedley, 1922

Splendrillia jarosae n. sp.

Plate 1, Figures 1,2.

Shell: Shell small, medium weight, narrow, high spire. Protoconch high, smooth, rounded, 2 whorls, 0.78 mm wide, 0.65 mm high. Suture narrow, slightly undulating. 6 teleoconch whorls. Distinct, rounded subsutural cord. Strong axial ribs extend over entire surface of whorl, low and angled to the left on the subsutural cord, larger on lower 2/3 of whorl, angled to right, 16 ribs on body whorl, 14 on penultimate whorl. Surface of ribs smooth, rounded. Whorl outline of two convex surfaces, lower larger. Ribs do not extend beyond shoulder of body whorl. Surface of body whorl behind lip swollen into varix. Outer lip thickened, stromboid notch

very faint. Sinus very deep, rounded, at 45° angle to shell, entrance almost sealed by strong callus. Columella broad, indistinct. Aperture subrectangular, deep. Shell truncated, anterior canal short, broad, deep. Anterior tip notched. Surface of shell glossy, uniform light pink, orange between ribs and in three faint spiral lines on body whorl, broad orange blotch on varix.

Measurements:

	Length (mm)	Width (mm)	Aperture (mm)	W/L	A/L
Holotype	8.9	3.4	3.6	0.38	0.40

Location of type

Holotype, AMS C. 165731.

Type locality

15 m, off Bountiful Islands, Gulf of Carpentaria, Queensland $16^{\circ}41'S$; $139^{\circ}50'E$.

Remarks

Splendrillia jarosae is known from a single dead collected specimen in excellent condition found in the Gulf of Carpentaria. The glossy, semitransparent shell which lacks spiral sculpture except on the rostrum at the anterior end of the shell, and indented axial ribs all are characteristic of *Splendrillia*. The new species is very close to *S. aurora* (Thiele, 1925) from Sumatra, Indonesia, which was subsequently

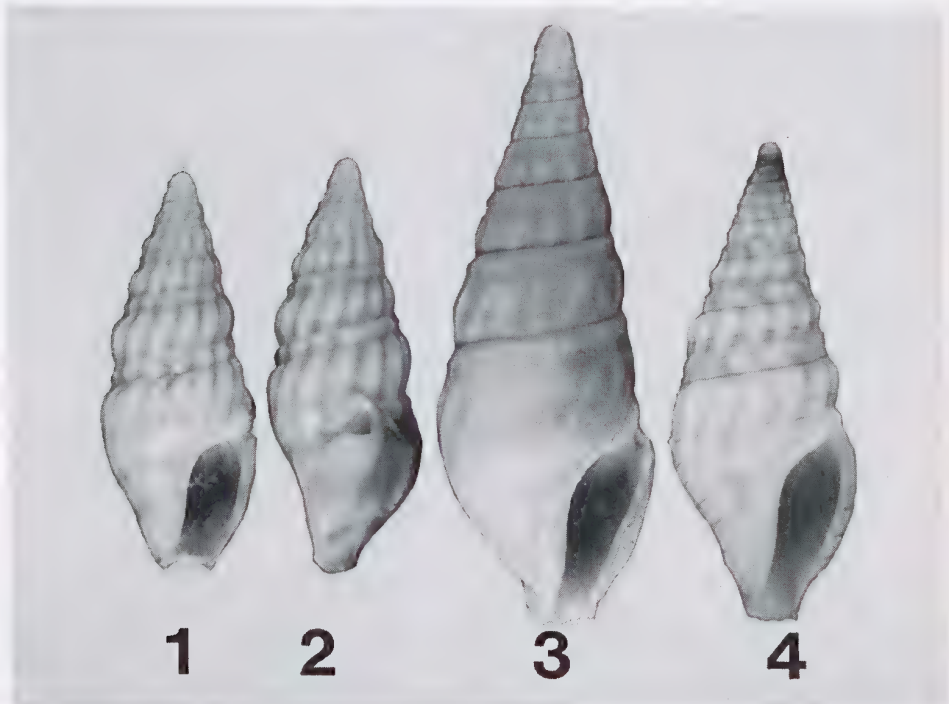


Plate 1. Figures 1-2. *Splendrillia jarosae* n. sp. Holotype, AMS C. 165731. Figure 3. *Splendrillia gratiosa* (Sowerby, 1896). NMNZ M.F.43133. Figure 4. *Splendrillia bednalli* (Sowerby, 1896). NMNZ M.F.43095.

recorded from the South China Sea by Tsuchida (1983). *Splendrillia jarosae* may be separated from *S. aurora* by being slightly narrower, with more numerous but less pronounced axial ribs.

The new species is also similar to "*Crassispira*" *duplaris* (Hedley, 1922) which was described from the same area. On examination *S. jarosae* can be distinguished from "*C.*" *duplaris* on the following criteria: "*C.*" *duplaris* has a broader shell, larger, more pointed protoconch, more rounded teleoconch whorls, more pointed axial ribs, and stronger varix. In addition, the ribs of *S. jarosae* do not penetrate as far down the body whorl, and the spiral striae below the ribs are faint on *S. jarosae* but strong on "*C.*" *duplaris*.

Splendrillia jarosae is also similar to *S. eburnea* (Hedley, 1922) from Victoria, but differs in being a more slender shell, with a narrower, more pointed protoconch, more distinct subsutural cord, broader ribs, and in having a varix, which is absent in *S. eburnea*.

Etymology

I am pleased to name this species after Ms. Anna Jaros, who has been of considerable assistance on my turrid research project over the last two years.

Splendrillia gratiosa (Sowerby, 1896)

Plate 1, Figure 3.

Drillia gratiosa Sowerby, 1896: 25, pl. 3, fig. 1.

In his original description Sowerby (1896) recorded having seen three specimens: "one adult (dead), one young (fresh) specimen, and a fragment". The dimensions of the species were given as 17.50 mm long and 6 mm wide. Two syntypes from the South Australian Museum (SAM D.13549) were available for the *Splendrillia* revision, a well worn adult and a fragment. My measurements of the adult were in close agreement with those of Sowerby (1896): 17.8 mm long and 6.1 mm wide. However the adult was too worn for identification, and I concluded that *S. gratiosa* was probably another species.

An additional specimen, which appears to be a syntype, has now been located in the Australian Museum. It was collected and presented by Sir Joseph Verco, who made the specimens for the original description available to Sowerby. The possible syntype (AMS C.47975) was also from the type locality of St. Vincent Gulf, and measures 14.3 mm in length, being smaller than the largest syntype examined by Sowerby. Sowerby described the shell as: "A smooth shell, pink, with longitudinal red flames ...". This colour pattern is absent in the adult specimen but present in the smaller shell, which now allows the species to be recognised. With the addition of the NMNZ material from the W. J. Paul collection, *S. gratiosa* can now be redescribed.

Shell

Shell medium length for genus, 18 mm, high spire, light weight. Protoconch smooth, globose, 2 whorls, 1.10 mm wide, 0.99 mm high; teleoconch of 8 whorls. Suture straight, distinct. Whorls slightly convex, with low, rounded subsutural cord. Upper whorls have low, broad, axial ribs but these do not reach body whorl. Very fine axial growth lines are present, but shell surface is smooth. Outer lip thickened, rounded, with small, but distinct stromboid notch. Sinus deep, U shaped, at 45° angle to shell, constricted by strong callus. Aperture rectangular, columella indistinct. Shell truncate, anterior canal short, broad, slight notch at tip.

Colour glossy pink, mouth of aperture slightly lighter, orangeish splotches between ribs, on subsutural cord and on body whorl.

Measurements

	Length (mm)	Width (mm)	Aperture (mm)	W/L	A/L
Syntype					
SAM D.13549	17.8	6.1	6.0	0.34	0.34
possible syntype					
AMS C.47975	14.3	5.8	5.8	0.40	0.40
18 m, off Port Lincoln (NMNZ M.F.43089)					
Mean (n=7)	16.6	6.0	6.0	0.36	0.36
S. D.	4.6	0.3	0.2	0.02	0.01

Location of types

Syntypes, 1 specimen plus fragment. SAM D.13549. Possible syntype: 1 specimen, AMS. C.47975.

Type locality

Gulf St. Vincent, South Australia.

Other material examined

SA: 18 m off Port Lincoln (NMNZ M.F.43089); Anxious Bay (NMNZ M.F.43172); Tumbay Bay (NMNZ M.F. 43114); Coffin Bay (NMNZ M.F.43133). 25 m, Great Australian Bight, 35°15'S; 137°55'E (AM). TAS: 155 m, N of Port Davey, 43°15'S; 145°30.6'E (AMS). NSW: Clarence R. (AMS).

Distribution

Primarily known from Gulf St. Vincent to the Great Australian Bight, South Australia, but there is a single Tasmanian record and one record from New South Wales.

Remarks

The bright pink colour and smooth body whorl readily distinguish *S. gratiosa* from other southern Australian *Splendrillia*, except for the Western Australian *S. hansenae* Wells, 1990. *S. hansenae* can be distinguished from *S. gratiosa* by being larger (18 mm vs. 11 mm), with a higher protoconch (1.10 mm vs. 0.86 mm), distinct spiral cord, stronger axial ribs, and orangeish blotching which is absent in *S. hansenae*.

Splendrillia bednalli (Sowerby, 1896)

Plate 1, Figure 4.

Drillia bednalli Sowerby, 1896: 25, pl. 3, fig. 3.

The only material available of *Splendrillia bednalli* for the *Splendrillia* revision was the syntypes from Gulf St. Vincent, an additional lot from Gulf St. Vincent and one lot from 73 m, off Neptune I., S. A.

Additional material available

SA: 31 m, Marsden Point, Kangaroo I. (AMS E.5775); Cape Donnington (NMNZ M.F. 43093 and M.F.43095); Port Lincoln (NMNZ M.F.43085); 25 m, Great Australian Bight, S. A. 35°15'S; 137°55'E (AMS). WA: 82 m, E of Hood Point, 34°21'S; 121°16'E (AMS); 77 m, Great Australian Bight, 35°12'S; 118°19'E (AMS); 73-77 m, S. of Wilson Inlet, 35°12'S; 117°00'E (AMS).

Distribution

The present information extends the known range of *S. bednalli* from a limited area in the region of Gulf St. Vincent, South Australia west to Wilson Inlet, Western Australia.

ACKNOWLEDGEMENTS

I thank I. Loch of the Australian Museum and B. Marshall of the National Museum of New Zealand for access to the material used in this paper. C. W. Bryce and A. Jaros provided the photographs. Dr. R. N. Kilburn of the Natal Museum was extremely helpful in reading a draft of the manuscript. This paper is a part of research on turrid systematics being undertaken with funding from the Australian Biological Resources Study.

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